

**DOCKET NOS. 00-0815 and 00-0816**

1 Q1: Please state your name and business address.

3 Illinois 61602.

4 Q2: By whom are you employed and in what capacity?

7 (AES Medina).

8 Q3: Please briefly describe your educational background and work experience.

17           Manager of the E. D. Edwards Station. I was appointed to the position of Director -

18 Technical Sales and Services at CILCO in October 1993. I served as Director – Technical  
19 Sales and Service at QST, an unregulated CILCO affiliate, from 1996 to July 1998, when I  
20 returned to CILCO as Director of Business Development. I became a Vice President of AES  
21 Medina in June, 2000.

22 Q4: What are your responsibilities as CILCO's Director of Business Development?

23 A4: I work closely with CILCO's Retail Group as a technical resource in the development of  
24 value added services and energy partnerships with large customers. My responsibilities  
25 include a focus on the pursuit of cogeneration opportunities within CILCO's service  
26 territory. I assist the CILCO Retail group in negotiating cogeneration agreements, and  
27 agreements such as the Tolling Agreement between CILCO and AES Medina which is the  
28 subject of this proceeding. Once an agreement has been entered into, I am responsible for  
29 implementing the design, engineering and construction of the facility. These responsibilities  
30 also include procuring financing for the project. My previous experience includes the  
31 responsibility for the development and operation of the Midwest Grain (now known as  
32 Indian Trails) cogeneration facility, which was the subject of Illinois Commerce Commission  
33 Docket 93-0447.

34 Q5: What is the purpose of your testimony in this proceeding?

35 A5: The purpose of my testimony is to explain the genesis of the cogeneration project among  
36 CILCO AES Medina and Caterpillar, Inc. (Caterpillar). I will also describe the technical,  
37 operational, efficiency and fueling aspects of this project, and I will describe the contractual

arrangements among the companies.

Q6: What is AES Medina's role in the project?

A6: This project was conceived as a CILCO generation project prior to the acquisition of CILCO by the AES Corporation. One of AES's core values, however, is that generating plants are run more efficiently and their people become better business people if they are stand-alone Exempt Wholesale Generators (EWGs) funded through non-recourse financing. If CILCO itself constructed and owned the new facility, project financing for the new facility would be impeded, and the new facility could not be approved as an EWG under the provisions of the Public Utility Holding Company Act (PUHCA). Consequently, CILCO caused the creation of an affiliated corporation, AES Medina, an Illinois limited liability company and a wholly owned subsidiary of AES Corporation, CILCO's parent. AES Medina undertook to construct and operate a cogeneration facility with an average electric generating capacity of approximately 40 Mw (net) on premises leased to AES Medina by Caterpillar at Caterpillar's Mossville, Illinois plant. CILCO and AES Medina negotiated a Tolling Agreement (Agreement) for the operation of the cogeneration plant and the provision of support services by CILCO for the Cogeneration Plant until July 1, 2021.

Q7: What was the genesis of this cogeneration project between CILCO and Caterpillar?

A7: Over the years, CILCO's least cost planning activities, and more recently, the development of competitive markets for the sale of electricity, have led CILCO to actively pursue cogeneration opportunities with existing industrial customers with steam production facilities.

Caterpillar has its principal offices and large manufacturing facilities located within CILCO's electric service area. Caterpillar is the world's leading manufacturer of earth-moving machinery and a leading supplier of agricultural equipment. Caterpillar also manufactures construction, mining and logging machinery; engines for trucks, locomotives, and boats; and electrical power-generation systems. Caterpillar operates manufacturing plants on six different continents, and sells its products worldwide. Caterpillar determined that for efficiency and environmental reasons, it should discontinue the operation of the coal-fired steam production plant used at its Mossville, Illinois, Performance Engine Products Division (PEPD) plant. Caterpillar had two options to replace its steam plant: (1) build a new steam plant, or (2) find someone else to build one. Caterpillar considers steam production a "non-core" function and, as a result, asked CILCO to construct a natural gas-fueled cogeneration facility on Caterpillar's Mossville premises to provide electric energy to the PEPD plant and to other Caterpillar facilities, and to provide steam heat service and chilled water service to the Mossville PEPD plant.

Q8: What additional benefits can Caterpillar and the Illinois economy obtain from the operation of this cogeneration facility?

A8: The electric generation equipment being used in the Cogeneration Plant was manufactured by a Caterpillar subsidiary, Solar Turbines Inc. Caterpillar is a major manufacturer of electric generating equipment, which is a growing market for Caterpillar, both within and outside the United States. Caterpillar's power generation equipment sales in 1999 were

78 reported to be \$1.8 billion or about 10 per cent of its total sales. Caterpillar's generator  
79 equipment sales in 2000 increased by almost 40 per cent, and have been reported to be \$2.6  
80 billion, and Caterpillar has estimated that these sales will increase to \$6 billion or 20 percent  
81 of total sales by 2006. The Medina Cogeneration Plant is a demonstration project to show  
82 the efficiency and benefits of using the type of gas-fired generators manufactured by  
83 Caterpillar and its subsidiaries for cogeneration facilities. The successful operation of the  
84 Medina facility will support the continued growth of Caterpillar's generator equipment sales.

85 Q9: How does the approval of these transactions benefit the public?

86 A9: Cogeneration benefits the public because it is a more efficient means of generating electric  
87 energy as compared with a similar generating facility that is not a cogenerator. It is the public  
88 policy of the State of Illinois, as set forth in Section 8-403 of the Act, to encourage the  
89 economical utilization of cogeneration. Moreover, because Caterpillar intends to use the  
90 cogeneration plant as a showcase to demonstrate the effective use and benefits of  
91 cogeneration, this will encourage the construction of more cogeneration facilities in the  
92 future.

93 Q10: What authority does the Commission have over AES Medina?

94 A10: I have been informed that because Medina will be engaged exclusively in the sale of power  
95 and energy and related steam heat service and chilled water service from a cogeneration  
96 facility, and Medina will have no service territory, that Medina is not a public utility under  
97 the provisions of Section 3-105 of the Act, is not an electric utility under the provisions of

Section 16-102 of the Act, and is not subject to Commission jurisdiction.

Q11: Please describe AES Medina's cogeneration facility.

A11: AES Medina is constructing a Cogeneration Plant to provide steam, electricity and chilled water to Caterpillar's PEPD Plant in Mossville, Illinois, and electricity to Caterpillar's foundry in Mapleton, Illinois. The Cogeneration Plant will have three 12.2 megawatt (Mw) Solar Titan 130 combustion turbine generators manufactured by Caterpillar's subsidiary, Solar Turbines, and three heat recovery steam generators that will provide up to 320,000 pounds of steam per hour at 600 psig and 750 degrees F. Before delivery to Caterpillar, this steam will pass through two back-pressure steam turbine-generator units with total capacity of approximately 10Mw. The energy required to spin the turbines reduces the pressure and temperature to the specifications of Caterpillar's steam heat service requirements. Since waste heat from the combustion turbines and only a portion of the energy in the steam is used to generate electricity, the process is extremely efficient. The heat rate for this electric production facility will be approximately 6,800 Btu/kWh, which is very efficient when compared with CILCO's overall system heat rate of 10,000 Btu/kWh (which is typical of a coal-fired base load unit). There will also be a gasfired back-up steam boiler rated at 100,000 pounds of steam per hour at 250 psig, saturated conditions. The chilled water facility will consist of three steam-powered absorption chillers, two electric motor-driven centrifugal chillers and a York natural gas engine-driven chiller, which will produce a maximum of 7,200 tons of cooling capacity.

Q12: Please describe the contracts between CILCO and AES Medina that were needed to facilitate the project and which require the approval of this Commission.

A12: Three of the contracts needed to facilitate the project require ICC approval: (1) the Tolling Agreement, attached, CILCO Exhibit 1.1, (2) the Consent Agreement, attached, CILCO Exhibit 1.2, and (3) the Receivables Assignment, attached, CILCO Exhibit 1.3.

Q13: Please summarize the provisions of the Tolling Agreement, CILCO Exhibit 1.1.

A13: Under the Tolling Agreement, CILCO will provide the natural gas, water and condensate required for the operation of the cogeneration facility. Medina will generate electricity and will provide steam heat service and chilled water service that will be sold to CILCO and resold to Caterpillar under a competitive service contract. CILCO will pay AES Medina the fixed charges and variable charges set forth in the Agreement. CILCO will be entitled to receive payment rebates from AES Medina whenever AES Medina fails to perform in accordance with the minimum requirements of the Tolling Agreement. Some energy from the cogeneration facility may be provided to Caterpillar facilities other than the PEPD plant, and delivery service charges will apply to Caterpillar under CILCO's filed tariffs for energy delivered to any Caterpillar facility other than the Mossville PEPD plant. Energy generated by AES Medina that is not resold to Caterpillar will be delivered into CILCO's electric system, and the related production costs will be included in CILCO's fuel adjustment. The costs of the gas provided to the Cogeneration Plant to provide steam heat service, chilled water service, and the electric energy that is resold to Caterpillar will be billed directly to

Caterpillar by CILCO. Caterpillar will provide the water and condensate to AES Medina on CILCO's behalf without any separate charge to CILCO. CILCO will not include the costs paid by Caterpillar, or any payments received by CILCO with respect thereto, in its purchased gas adjustment or its fuel adjustment, so that CILCO's bundled retail customers will be indifferent to the costs incurred by CILCO to provide energy, steam heat service and chilled water service that is sold to Caterpillar under the competitive service agreement. As described by Mr. Shea, a formula will be used to allocate the costs between Caterpillar and CILCO's fuel adjustment clause.

Q14: Please summarize the provisions of the Consent Agreement, which requires Commission approval under Section 7-101 of the Act.

A14: Medina's lenders require that CILCO acknowledge and consent, by executing a Consent Agreement, that the Tolling Agreement has been assigned by Medina to the lenders for security purposes, and that CILCO agree to certain remedies in favor of the lenders in the event of bankruptcy or default by Medina.

Q15: Please summarize the provisions of the Receivables Assignment, which requires approval under Sections 7-101 and 7-102 of the Act.

A15: Under the Receivables Assignment, CILCO has assigned to Medina and its lenders certain payments to become due to CILCO from Caterpillar under the competitive service contract relating to the output of the cogeneration facility. The Receivables Assignment requires payment to Medina and Medina's lenders only in the event of default by CILCO.



158 Q16: What is the schedule for construction and operation of the Cogeneration Plant?

159 A16: Construction of the cogeneration facility began in July, 2000. Under CILCO's Agreement  
160 with Caterpillar, Caterpillar requires steam heat service from the facility March 1, 2001.

161 Therefore, CILCO has requested that the Commission approve the Petitions in Docket Nos.  
162 00-0815 and 00-0816 on an expedited basis, and enter an order by February 15, 2001.

163 CILCO had planned to file the petitions which initiated this proceeding several months ago,  
164 but the filings were delayed due to the extensive negotiations with the banks that were  
165 necessary to put in place the project financing which supports the Medina project.

166 Q17: Does this complete your prepared direct testimony?

167 A17: Yes, it does.